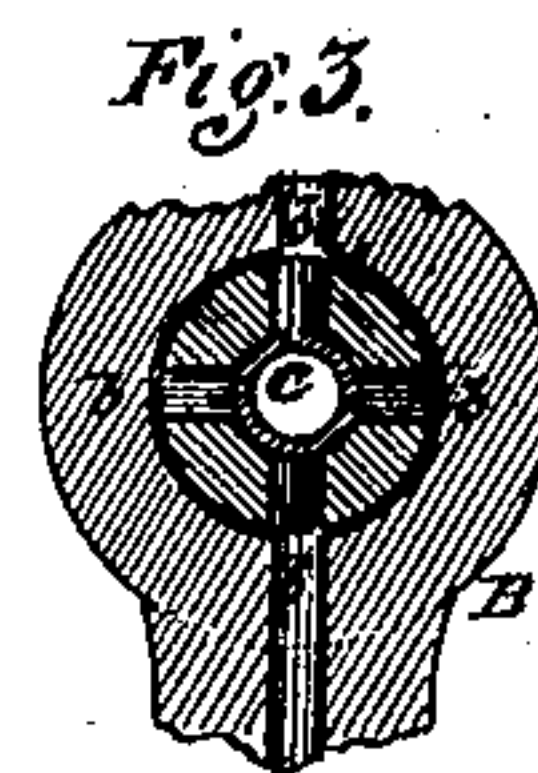
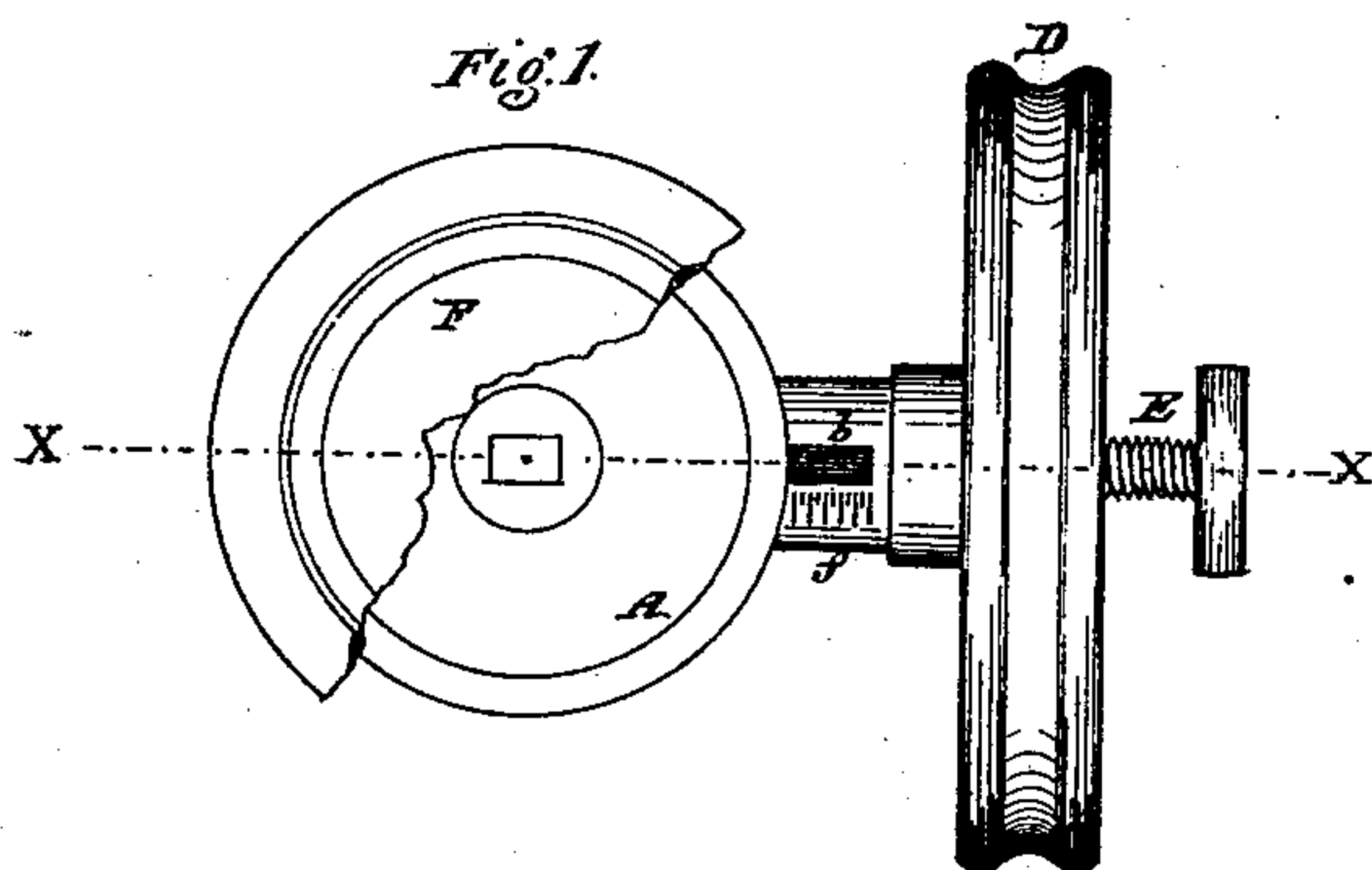
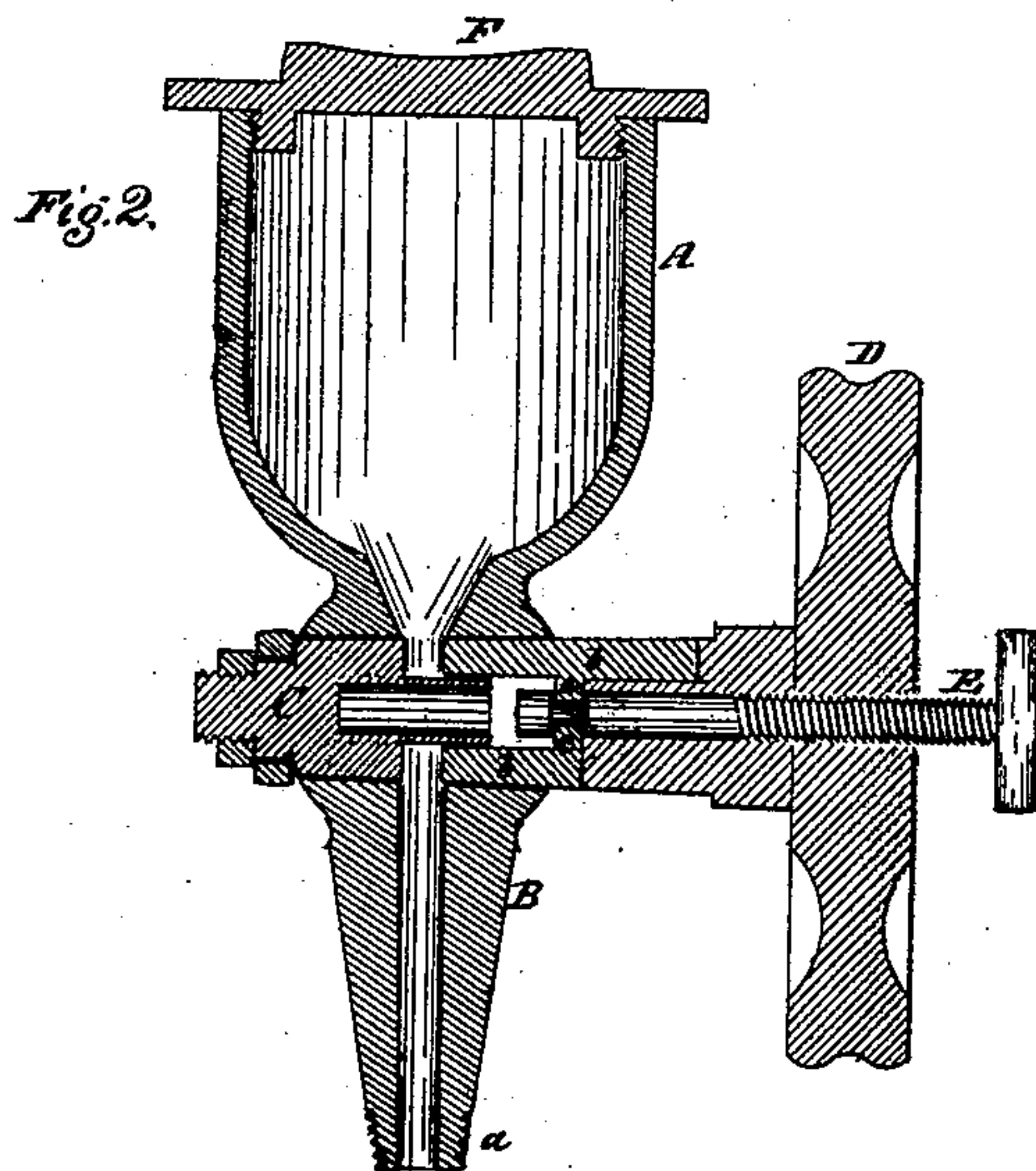


G. C. Munson,
Feeding Quicksilver Stamps.
No. 111,669. *Patented Feb. 7. 1871.*



Witnesses.
Wm. S. Thornton
Wm. Venable

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GEORGE C. MUNSON, OF EMPIRE CITY, COLORADO TERRITORY.

Letters Patent No. 111,669, dated February 7, 1871.

IMPROVEMENT IN FEEDING QUICKSILVER TO STAMPS AND AMALGAMATORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE C. MUNSON, of Empire City, Clear Creek county, and Territory of Colorado, have invented a new and improved Apparatus for Feeding Quicksilver to Stamps and Amalgamators; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, forming a part of this specification, and to the letters of reference marked thereon.

My invention has for its object to provide an apparatus for feeding quicksilver to stamp-mills and amalgamators, which may be readily adjusted so as to supply a larger or smaller quantity of quicksilver; as may be desired, to the mill or amalgamator, and by means of which the quantity so fed or supplied may be accurately measured and determined.

Hitherto, the usual mode employed has been to throw in by hand a small quantity of quicksilver at certain intervals; but it is evident that by such means the quantity fed would be irregular, even with the greatest care.

By my invention, however, the quantity supplied can be regulated with the greatest nicety and precision.

This invention is also well adapted for supplying oil to machinery for lubricating purposes.

The nature of my invention consists in the employment or use of a cup provided at its lower extremity with a hollow stem, through which the quicksilver is conducted into the stamp or amalgamator.

Within the said stem is fitted and works a horizontal tapering shaft, having an equal bearing through the said stem, which said shaft is provided with one or more longitudinal slots, within each of which said slots is fitted a sliding plug, operated by a set-screw located and working within the shaft.

Secured to the outer end of this shaft is a pulley, by which the shaft is operated, and, as the shaft rotates, the slots already mentioned receive a charge of quicksilver from the cup, and deliver it into the opening in the stem, from whence it passes into the stamp or amalgamator, the size of the charge being regulated at will by means of the set-screw above mentioned.

To enable others skilled in the art to make and use my invention, I will proceed more particularly to describe its construction and operation.

Figure 1 is a top plan view of my apparatus.

Figure 2 is a vertical section, taken through the line X X.

Figure 3 is a transverse section of the shaft to show the position of the sliding plugs.

Letters of like name and kind indicate like parts in each of the figures.

A represents the cup, which may be made of any proper material and of suitable dimensions, and is provided at its lower extremity with a hollow stem, B, through which the quicksilver is conducted from the cup A to the amalgamator.

The lower end of this stem is fitted into the shell or covering of the amalgamator on which it is to be used, either by means of a screw-thread, as seen at *a*, or by any other suitable and well-known means.

Within the stem B is closely fitted a horizontal tapering shaft, C, which has an equal bearing through the said stem, and is made to rotate therein by means of a pulley, D, attached and secured to its outer end.

The shaft C is provided with one or more longitudinal slots, which, as the shaft rotates, receive the quicksilver from the cup A, and deposit it within the hollow stem B, from whence it passes into the amalgamator.

Within each of these slots is fitted a sliding plug, *b*, for the purpose of regulating the quantity or size of the charge of quicksilver received from the cup and deposited within the amalgamator.

Each of the said plugs is provided with a gib, *c*, that fits and works in an annular groove on a shaft attached to a set-screw, E, located and working within the shaft, by which means the said plugs are made adjustable, so that the quantity of quicksilver received into the slots at each charge may be increased or diminished as may be desired.

One of these plugs is made longer than the others, and extends outside of the stem, so that its end comes opposite to a scale, *f*, marked upon the shaft, by which means the quantity of quicksilver received into the slots from the cup and deposited in the amalgamator is accurately measured.

F represents the lid or cover of the cup, which does not require particular description.

It will be understood that the pulley D may be either turned by hand or driven by a belt, as may be desired.

The operation is simple and readily understood.

When the shaft C is made to rotate, each of the slots in its turn comes directly underneath the opening in the bottom of the cup A, and receives its charge, which it deposits in the hollow stem B, from whence it passes into the amalgamator, the quantity or size of the charge being regulated by means of the sliding plugs fitted in the slots on the shaft, which said plugs are adjusted by means of the set-screw E, so that the recess will hold just the quantity wanted; and, the shaft being closely fitted within the stem, the charge of quicksilver received from the cup into

the recess is cut off and retained in the latter, until, by the rotation of the shaft, it is brought to the open space in the lower part of the stem, when it falls out and passes into the amalgamator.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The adjustable plugs *b*, operated by means of a set-screw, and constructed and arranged in connection with the shaft *C* and cup or reservoir *A*, to cut off

and deliver to the stamp-mill or amalgamator any desired quantity of quicksilver, substantially as herein shown and described.

2. In combination with the plugs *b* and shaft *C*, the scale or indicator *f*, substantially as described, and for the purposes set forth.

GEORGE C. MUNSON.

Witnesses:

JOHN S. THORNTON,
WM. VENTZ.